

REMARKS

Claims 1-22 are currently pending in the application. By this response, claims 1, 9, 10, 12, 15, and 17 are amended and claim 22 is added for the Examiner's consideration. The amendments and added claim do not add any new matter. For example, support for the amendments and added claim is provided in the claims as originally filed, at pages 8-11 of the specification, and in FIGS. 1-4. Reconsideration of the rejected claims in view of the amendments and the following remarks is respectfully requested.

Allowed Claims

Applicants appreciate the indication in the Advisory Action dated November 20, 2006 that claims 18-21 are allowed and that claims 9, 10, 15, and 17 contain allowable subject matter.¹ By this response, claims 9, 10, 15, and 17 have been re-written in independent form by amending these claims to include all of the features of their respective base claims and any intervening claims. Therefore, claims 9, 10, 15, 17 and 18-20 should be allowed.

35 U.S.C. §102 Rejection

Claims 1-21 were rejected under 35 U.S.C. §102(b) for being anticipated by U. S. Patent No. 5,687,817 issued to Kobayashi *et al.* ("Kobayashi"). This rejection is respectfully traversed.

Applicants submit that Kobayashi does not show each and every feature of the claimed invention.

¹ Applicants note that claim 21 depends indirectly from independent claim 1, not from independent claim 18. Therefore, Applicant assume that, prior to this response, claim 21 stands rejected and not allowed (as indicated in the Advisory Action).

Claims 1-11 and 21

As previously discussed, the present invention relates to a disc brake for a vehicle that is used in vehicles such as automobiles and motorcycles. More specifically, the invention relates to the structure of pad retainers that are set in pad guide grooves of caliper support arms and movably support ears of back plates of friction pads. Implementations of the invention prevent the play of friction pad ears to reduce brake noise and suppress juddering. Moreover, implementations prevent the friction pads from falling off a caliper bracket in attaching the friction pads to the caliper bracket tentatively, thereby allowing the friction pads to be attached easily. Claim 1 recites, *inter alia*, pad falling-off preventive portions for preventing the friction pads from falling off the caliper support arms in the disc axial direction. Kobayashi does not disclose this feature, and therefore does not anticipate the claimed invention.

As previously noted, Kobayashi shows a disc brake including a caliper body 6 supported by a carrier 11 fixedly attached to a vehicle. Back plate 13 of friction pad 10 includes ears 15. Pad spring 31 is disposed in grooves 16 (FIGS. 12-14). The ears 15 are movably supported in the grooves 16 between guiding portions 31a of the pad spring 31. The pad spring 31 has first spring portions 32, 32a. The first spring portions 32, 32a extend between the guiding portions 31a (FIG. 14) and contact the ear 15 to urge the friction pad 10 away from the disc rotor 7 (FIGS. 15, 17). A torque bearing portion 31b extends downward from the guiding portions and supports a retainer portion 31c, which supports second spring portions 33, 33a. These second spring portions 33, 33a function in the same manner as the first spring portions 32, 32a to bias the friction pad 10 away from the disc rotor 7 (FIGS. 14, 16).

Applicants acknowledge that first spring 32a may constitute a pad returning portion for urging the friction pads away from the disc rotor. However, Kobayashi does not disclose pad

falling-off preventive portions anywhere in the disclosure. Moreover, Kobayashi does not disclose pad falling-off preventive portions for preventing the friction pads from falling off the caliper support arms *in the disc axial direction*, as recited in claim 1. That is, no part of Kobayashi's retainer prevents the friction pad from falling off the caliper support arms in the disc axial direction, as disclosed and recited in the instant application.

Further, Applicants submit that claims 2-8, 11, and 21 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention.

For example, claim 21 recites the pad falling-off preventive portions extend from the inner receiving portion outward in a disc axial direction. Kobayashi does not contain these features. Claim 21 depends from claim 11, which further recites the receiving portions include an inner receiving portion and an outer receiving portion and the ears of the friction pads are movably supported by the pad guide grooves via the inner receiving portion and the outer receiving portion. Applicants note that the Examiner has failed to identify these features in Kobayashi.

Moreover, claims 9 and 10, which the Examiner indicated as having allowable subject matter, have been re-written in independent allowable form. Therefore, the rejection of claims 1-11 and 21 should be withdrawn.

Claims 12-17

Claim 12 recites, *inter alia*, pad retainers including both (i) an extending portion extending in a disc radial direction behind the friction pad and (ii) a pad returning portion. Kobayashi does not disclose these features, and therefore does not anticipate the claimed invention.

As discussed above, Applicants acknowledge that Kobayashi's first spring 32a may constitute a pad returning portion for urging the friction pads away from the disc rotor. However, Kobayashi does not disclose an extending portion extending in a disc radial direction behind the friction pad, as recited in claim 12. That is, no part of Kobayashi's retainer extends behind the friction pad in a disc radial direction, as disclosed and recited in the instant application.

Claim 12 further recites the pad returning portion comprises an elongated strip which extends towards the disc rotor and is longer than a distance by which the ears of the friction pad is moved from a time when a lining of the friction pad is new to being fully worn. Kobayashi does not contain these features.

Instead, Kobayashi shows oblique surface 32a of first spring portion 32, 32a (FIGS. 14, 17). As the friction pad 10 is worn away, back plate 13 moves toward the disc rotor (col. 12, lines 48-56). However, Kobayashi does not mention that the length of oblique surface 32a is longer than the distance by which the ears move from a time when the lining of the friction pad is new to be fully worn. To the contrary, Kobayashi only mentions an indeterminate degree of wear, but does not mention the case of the lining being fully worn.

In the Response to Arguments of the Final Office Action dated August 7, 2006, the Examiner asserts:

... if the elongated strip (32a) were not longer than a distance by which the ears of the friction pad is to be worn, the caliper would not operate correctly and most likely the spring would end up to constantly bias the pad toward the rotor.

Applicants respectfully disagree. The above-noted statement is an implied assertion that Kobayashi inherently contains the recited features recited of the claimed invention. The Examiner is reminded of the following guidance that MPEP §2112 provides regarding inherency:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Applicants respectfully submit that, based upon the above-noted passage of MPEP §2112, the Examiner's reasoning is improper on its face. The Examiner's assertion that "the caliper would not operate properly and most likely would ..." (emphasis added) clearly runs afoul of the mandate that "[i]nherency ... may not be established by probabilities and possibilities." Therefore, the rejection of claim 12 is improper and should be withdrawn.

Further, Applicants submit that claims 13, 14, and 16 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims recite additional features that further define the present invention.

For example, claim 13 recites the pad returning portion includes a spring back portion comprising a piece extending outward in the disc axial direction and the extending portion includes a bent back portion to form a circular arc forming an elastic loop portion. Kobayashi does not contain these features. More particularly, Kobayashi does not contain an extending portion extending in a disc radial direction behind the friction pad and including a bent back portion to form a circular arc forming an elastic loop portion.

Furthermore, claim 16 recites the pad retainers include an insertion guide which is bent outward from each outer receiving piece on a side opposite to the disc rotor, as recited in the claimed invention. Kobayashi does not contain these features. Applicants note that the Examiner has not identified an element in Kobayashi that constitutes an insertion guide. In any event, Kobayashi does not show anything bent outward from each outer receiving piece on a side opposite the disc rotor.

Moreover, claims 15 and 17, which the Examiner indicated as having allowable subject matter, have been re-written in independent allowable form. Therefore, the rejection of claims 12-17 should be withdrawn.

Claims 18-20

As discussed above, the Examiner indicated in the Advisory Action that the arguments submitted in the Request for Reconsideration on November 7, 2006 overcame the rejection of, *inter alia*, claims 18-20. The Advisory Action further indicated that claims 18-20 were allowed. Accordingly, Applicants expressly incorporate by reference the arguments presented on pages 20-22 of the Request for Reconsideration. As such, the rejection of claims 18-20 in view of Kobayashi is moot.

Accordingly, Applicants respectfully request that the rejection over claims 1-21 be withdrawn.

New Claim

New claim 22 is added to further define the invention and is believed to be patentably distinct from the applied art and in condition for allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,
Takashi ONO

A handwritten signature in black ink, appearing to read "Andrew M. Calderon", written over a horizontal line.

Andrew M. Calderon
Reg. No. 38,093

December 27, 2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191